

## **REMARKS/ARGUMENTS**

Reconsideration is respectfully requested.

The Office Action dated December 16, 2006 indicates that Claims 2-4 are objected to as being dependent on a rejected base claim but would be allowable if rewritten to include all of the limitations of the base claim and any intervening claims, for which indication the Applicants express their appreciation.

By this amendment, Applicant has amended Claim 2 to render it in independent form, including essentially all of the limitations set forth in Claim 1, on which Claim 2 previously depended. The limitation that the fuel gauge “directly” measure the capacity of hydrogen was not included in the amendment, as the word “directly” was not considered necessary for allowance of amended Claim 2.

With respect to Claims 1 and 19, that term “directly” continues to be recited therein so that the claim recites that the fuel gauge directly measures the capacity of the hydrogen by one or another method, as set forth in the dependent claims depending from Claim 1.

### **The Rejection of Claims 1 and 19 is Traversed**

It is respectfully submitted that the sole reference relied upon in support of the rejection is U.S. Patent No. 6,155,099, to Kobayashi et al. (“Kobayashi”). Kobayashi fails to teach the limitation that the fuel gauge “directly” measures the hydrogen capacity because Kobayashi requires that the “hydrogen occluding material” be incorporated within a matrix of a binder, such as carbon powder or PTFE powder, so that it “results in change in the distances between the

hydrogen occluding metal particles,” see column 3, lines 1-39. That is, Kobayashi teaches that the resistance of the hydrogen occluding metal particles can be varied by the ratio of hydride particles relative to the binder, and that the binder is required so as to provide accurate resistance measurements. Moreover, other alternative binders are taught, such as electrically conductive powders, for example, carbon powder, aluminum powder or iron powder, column 3, lines 33-37.

In contradistinction, the present application fails to disclose or require any type of binder, whether conductive, semi-conductive or non-conductive, and this permits the direct measurement of the hydrogen capacity in the hydrogen alloy. As is described herein and in the U.S. Patents incorporated in the specification by reference, the hydrogen alloys are themselves in powder form and do not have any alloy binder. It is desirable that the volume of the canister contain as much hydride alloy, and thus as much hydrogen absorbing material, as possible within the cubic volume of the inside of the canister. Consequently, the addition of the binder as taught by Kobayashi detracts from the ability to maximize hydrogen storage, both per unit weight and also per unit volume, because valuable space and weight are taken up by the non-absorbing binder materials.

Because Claim 1 has been shown to distinguish the sole Kobayashi reference because no direct measurement is taught, and none of the other cited references appear to add appreciably to the teachings of Kobayashi, it is respectfully submitted that the generic Claims 1 and 19 are now allowable. Applicants respectfully submit that all Claims 1-19 are now allowable, and

request the withdrawal of the species restriction requirement based on the allowability of generic Claim 1.

### **Conclusion**

For the above reasons, it is considered that the claims, as amended, find support in the application specification as filed, and that the combination of elements recited in the pending claims, as amended, distinguish over the references of record. Accordingly, reconsideration and withdrawal of the outstanding rejections are respectfully requested and an indication of allowable subject matter is earnestly solicited.

### **Extension of Time**

Also submitted herewith is a Request for Extension of Time in which to respond to the Office Action, extending the period for response for one month up to and including April 16, 2006. The required fee of \$60.00, small entity status, is also enclosed.

Respectfully submitted,



Vangelis Economou  
Reg. No. 32,341  
Tel.: (312) 214-7770  
Attorney for Applicant(s)

Date: April 14, 2006

RYNDAK & SURI LLP  
200 W. Madison Street, Suite 2100  
Chicago, IL 60606  
(312) 214-7770